

CLAIMS

1. A motor drive control circuit, comprising;

a rotation control amplifier that inputs a peak voltage of a voltage generated in an impedance element for detecting a drive current of a motor, a voltage limiting reference voltage, and a rotation speed control voltage for controlling a rotation speed of the motor and compares the lower of the voltage limiting reference voltage and rotation speed control voltage with the peak voltage;

a rotation limiting comparator that inputs and compares a voltage substantially equal to said voltage limiting reference voltage with said peak voltage;

a synthesis circuit that amplifies a rotation position detection signal of the motor according to an output voltage of the rotation control amplifier;

a PWM output comparator that compares an output of the synthesis circuit with a triangular wave voltage of a triangular wave generator and outputs a PWM signal; and

a motor-driver control circuit that inputs the PWM signal and an output signal of the rotation limiting comparator, removes an output period of the rotation limiting comparator from an ON period of the PWM signal and controls a motor driver that drives the motor.

2. The motor drive control circuit according to claim 1,
wherein

the rotation control amplifier, rotation limiting comparator,
PWM output comparator, and motor-driver control circuit are
integrated on a semiconductor substrate.

3. A motor apparatus, comprising;

the motor derive control circuit according to claim 1 or
claim 2;

a motor driver controlled by the motor drive control
circuit; and

a motor driven by the motor driver.